



Pending

Active

- EAST**
- L1: (50593) phenolic adj resin
 - L2: (1027) 521/174
 - L4: (795) novolak adj 11
 - L5: (4497) novolak same 11
 - L6: (0) 13 and 15
 - L7: (1) 13 and novolak
 - L3: (20) 11 and 12
 - L8: (2196) 15.ab.
 - L9: (25943) "521".clas.
 - L10: (12) 18 and 19
 - L11: (120480) inoue.in.
 - L12: (28) 15 and 111
 - L13: (20771) 11.ab.
 - L14: (20929) "11.ab.19" and 1 13
 - L15: (250) 19 and 113
 - L16: (3) 12 and 113
 - L17: (101655) polyurethane and (foam or foamed)
 - L18: (94) 15 and 117
 - L19: (20) 11 and 12**
 - L20: (2) ("5756642").PN.
 - L21: (1197546) mw or (molecular adj weight)
 - L22: (2) 120 and 121
 - L23: (351106) mp or melting adj point
 - L24: (1) 120 and 123
 - L25: (1663) phenolic adj polymer
 - L26: (0) 125 and 12
 - L28: (0) 19 and 127
 - L29: (1) 117 and 127
 - L27: (163) novolak same 125

(11) According to the invention, there is provided a method of producing an open cell rigid polyurethane foam which comprises reacting a polymethylene polyphenylisocyanate prepolymer with a polyol at an NCO/OH equivalent ratio of 1.3 to 3.0 by use of a blowing agent substantially comprising water in the presence of a catalyst, a foam stabilizer and a cell opening agent.

(12) The polyol includes a polyether polyol which has a functionality of 2-8 and a hydroxyl value of 300-600 mg KOH/g and which is used in the production of conventional rigid polyurethane foam, and a polyester polyol which has a functionality of 2-4 and a hydroxyl value of 250-500 mg KOH/g and which is used in the production of conventional rigid polyurethane foam. There may also be used a phenolic resin which has reactive methylois. Among these polyols is preferred a polyether polyol having a hydroxyl value of 300-600 mg KOH/g which is obtained as an addition product of ethylene oxide or propylene oxide or both to a compound containing hydroxyl groups such as trimethylol propane or sorbitol, or a polyamino compound such as o-tolylene diamine or m-tolylene diamine.

(13) The polymethylene polyphenylisocyanate prepolymer used in the invention is obtained by the reaction of a polymethylene polyphenylisocyanate (hereinafter, somewhere, referred to as PHDI) of the formula ##STR1## wherein n is an integer of 0-6, which is commercially available, with a compound containing hydroxyl groups therein, and has an amine equivalent preferably of 140-200 mg KOH/g. There may be used as the compound containing hydroxyl groups therein, for example, a monoalcohol or phenolic compound having a functionality of one and a molecular weight of 32-300, or a polyol having a functionality of two to three and a molecular weight of 62-600. Accordingly, the compound containing hydroxyl groups therein used may be exemplified by a monoalcohol such as methanol, ethanol, n-butanol, ethylene glycol monomethyl ether or diethylene glycol monomethyl ether; a diol such as bisphenol A, o-, m- or p-cresol, ethylene glycol, diethylene glycol, propylene glycol, 1,4-butanediol or 1,6-hexanediol; a triol such as glycerine, trimethylol propane; other polyfunctional alcohols such as methyl glucoside, sucrose, sorbitol or dulcitol.

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	U	Document ID	Issue Date	Pages	Title	Current OR	Current XRef	Retrieval C	Inventor	S	C	P	
11	<input type="checkbox"/>	US 5621043 A	19970415	13	Elastomeric sealants	525/111	524/710; 524/764;		Croft; Thomas S.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	<input type="checkbox"/>	US 5575871 A	19961119	7	Heat insulating material and method for producing same	156/78	156/213; 156/214;		Ryoshi; Hiroto et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	<input type="checkbox"/>	US 5457138 A	19951010	5	Method for producing open cell rigid polyurethane foam	521/125	521/124; 521/137;		Yuge; Kiyohiro et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	<input type="checkbox"/>	US 5422380 A	19950606	18	Sound absorbing and decoupling syntactic foam	521/107	521/137; 521/159;		Mendelsohn; Morris A. et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	<input type="checkbox"/>	US 5350777 A	19940927	7	Production and use of open cell rigid polyurethane foam	521/117	521/118; 521/124;		Yuge; Kiyohiro et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	<input type="checkbox"/>	US 5169875 A	19921208	4	Urethane composition	521/155	521/163; 521/170;		Nakamura; Tsutomu et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	<input type="checkbox"/>	US 5082868 A	19920121	6	Method for the preparation	521/114	521/116;		Burkhart; Georg et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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